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EXAMINER	
FLANDERS, ANDREW C	
ART UNIT	PAPER NUMBER
2644	

DATE MAILED: 09/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/802,111	FAY ET AL.	
	Examiner	Art Unit	
	Andrew C. Flanders	2644	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 August 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-56* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-56* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *7 March 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2 August 2005 has been entered.

Response to Arguments

Applicant's arguments with respect to claims 1 - 56 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 10 and 11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 10 and 11 recite the limitation "said defining" .There is insufficient antecedent basis for this limitation in the claim.

It appears to the examiner as though this term should read "said generating". For the purpose of expediting prosecution, it will be understood that way.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 – 5, 7 – 16, 18, 20 – 22, 24, 25, 27 – 30, 32 – 38, 40 – 43, 45, 46 and 48 - 56 are rejected under 35 U.S.C. 102(b) as being anticipated by Monterio (U.S. Patent 5,778,187).

Regarding **Claim 1**, Monterio discloses:

A method comprising:

receiving multiple streams of audio wave data in response to request from audio wave data consumers (i.e. audio information is delivered in real time to any number of widely distributed users; col. 2 lines 10 – 15);

dynamically generating a plurality of logical buses in response to a need associated with receiving the streams of audio wave data, the logical buses each corresponding to an audio wave data consumer (i.e. A user chooses to tune in or tune out of a particular channel; col. 2 lines 20 – 22; the media servers start and stop streams of information to those users col. 3 lines 29 - 33; the assignment of users to media servers is done using control transactions among the user; col. 6 lines 20 – 25; and the control architecture handles the starting and stopping of audio streams; col. 8 lines 32 - 36. In other words, the control architecture dynamically generates connections (*logical buses*) in response to a user tuning in or out);

assigning at least one of the multiple streams of audio wave data to a plurality of the logical buses (i.e. the control architecture handles the starting and stopping of audio streams and it is scalable so that any number of users can be managed; col. 8 lines 33 – 36);

routing any audio wave data stream assigned to a particular logical bus to the audio wave data consumer corresponding to said particular logical bus (i.e. the control servers are responsible for keeping track of which users are listening to which channels and for directing the media servers to start and stop streams of information to those users; col. 3 lines 29 – 34); and

dynamically releasing at least one of the logical buses when no longer needed to route a stream of audio wave data (i.e. A user chooses to tune in or tune out of a particular channel; col. 2 lines 20 – 22; the media servers start and stop streams of information to those users col. 3 lines 29 – 33).

Regarding **Claim 2**, in addition to the elements stated above regarding claim 1, Monterio further discloses:

further comprising generating the streams of audio wave data in response to receiving a synthesizer instruction (i.e. the control architecture handles the starting and stopping of audio streams; col. 8 lines 30 – 35; and the user chooses to tune in or out; col. 2 lines 20 – 22; the synthesizer instruction being the request from the user).

Regarding **Claims 3, 16, 43, 49, 50 and 53**, in addition to the elements stated regarding claims 1, 13, 25, 36, 45 and 52, Monterio further discloses:

wherein a plurality of audio wave data streams are assigned to at least one of the logical buses (i.e. the information is delivered to any number of widely distributed users; col. 2 lines 10 – 15)

Regarding **Claims 4, 14, 41 and 54**, in addition to the elements stated regarding claims 1, 13, 36 and 52, Monterio further discloses:

wherein each logical bus corresponds to a single audio wave data consumer (i.e. the media server has a single connection (*logical bus*) to each user; Fig. 1).

Regarding **Claims 5,15, 42 and 55**, in addition to the elements stated regarding claims 1,13, 36 and 52, Monterio further discloses:

wherein at least two of the logical buses correspond to the same audio wave data consumer (i.e. the media server and control server each have a connection (*logical bus*) to the user; Fig. 1).

Regarding **Claims 7, 18 and 48**, in addition to the elements stated regarding claims 1, 13 and 45, Monterio further discloses:

wherein the audio wave data consumer performs an action of effects-processing the audio wave data prior to outputting the audio wave data (i.e. the audio is compressed when it is received and decompressed when output; col. 5 lines 5 – 17).

Regarding **Claims 8 and 34**, in addition to the elements stated regarding claims 1 and 25, Monterio further discloses:

wherein said assigning comprises creating a data structure and correlating the logical buses with corresponding audio wave data consumers (i.e. Fig 3. shows a multicast distribution structure and Fig. 4 shows a unicast distribution structure; furthermore, if the Media servers is directly connected to the same physical network as the user, multicast can be used to transmit the packet stream to all of the users; col. 6 lines 6 – 8; and in the case that a media server is serving a user who is not on the same physical network, a unicast transmission is used; col. 6 lines 17 – 19).

Regarding **Claims 9 and 35**, in addition to the elements stated regarding claims 1 and 25, Monterio further discloses:

wherein said assigning comprises creating a data structure and correlating the logical buses with corresponding audio wave data consumers, and wherein said routing comprises referring to the data structure (i.e. Fig 3. shows a multicast distribution structure and Fig. 4 shows a unicast distribution structure; furthermore, if the Media servers is directly connected to the same physical network as the user, multicast can be used to transmit the packet stream to all of the users; col. 6 lines 6 – 8; and in the case that a media server is serving a user who is not on the same physical network, a unicast transmission is used; col. 6 lines 17 – 19).

Regarding **Claim 10**, in addition to the elements stated above regarding claim 1, Monterio further discloses:

wherein said defining comprises instantiating a programming object to receive the multiple streams of audio wave data (Fig. 18 shows a user software interface that the user operates to receive the audio; also see Tables 1 and 2 defining various programming objects).

Regarding **Claim 11**, in addition to the elements stated above regarding claim 1, Monterio further discloses:

wherein said defining comprises instantiating a programming object to receive the multiple streams of audio wave data and wherein said routing comprises calling an interface of the programming object (Fig. 18 shows a user software interface that the user operates to receive the audio; also see Tables 1 and 2 defining various programming objects).

Regarding **Claims 12, 51 and 56**, in addition to the element stated above regarding claims 1, 45 and 52, Monterio discloses:

One or more computer-readable media comprising computer-executable instructions that, when executed, direct a computing system to perform the method of claim 1 (i.e. the method of claim one operates over a network including servers and user devices, these devices operate by a sequence of objects; see col. 8 lines 45 – 51 and Tables 1 and 2 and col. 11 lines 24 – 67 and col. 12 lines 1 – 10).

Regarding **Claim 13**, Monterio discloses:

An audio generation system (abstract), comprising:

a plurality of audio wave data sources that produce one or more streams of audio wave data (i.e. a satellite, cable, broadcast and hard disk feed in Fig. 1);

a plurality of audio wave data consumers that receive one or more streams of audio wave data (i.e. audio information is delivered in real time to any number of widely distributed users; col. 2 lines 10 – 15);

a software component that dynamically generates logical buses in response to a need associated with receiving the streams of audio wave data and that releases at least one of the logical buses when no longer needed, the logical buses corresponding respectively to the plurality of audio wave data consumers (i.e. A user chooses to tune in or tune out of a particular channel; col. 2 lines 20 – 22; the media servers start and stop streams of information to those users col. 3 lines 29 - 33; the assignment of users to media servers is done using control transactions among the user; col. 6 lines 20 – 25; and the control architecture handles the starting and stopping of audio streams; col. 8 lines 32 - 36. In other words, the control architecture (through software objects) dynamically generates and releases connections (*logical buses*) in response to a user tuning in or out);

the software component configured to receive one or more of the streams of audio wave data at each of the generated logical buses, and route any audio wave data that is received at a particular logical bus to an audio wave data consumer corresponding to said particular logical bus (i.e. the control servers are responsible for keeping track of which users are listening to which channels and for directing the media servers to start and stop streams of information to those users; col. 3 lines 29 – 34).

Regarding **Claim 20**, in addition to the elements stated above regarding claim 13, Monterio further discloses:

wherein the sources are software components (i.e. the feeds are optionally recorded; col. 3 line 1).

Regarding **Claim 21**, in addition to the elements stated above regarding claim 13, Monterio further discloses:

wherein the sources are programming objects having interfaces that are callable by a software component to generate the one or more streams of audio wave data (i.e. a channel guide request object; Table 1).

Regarding **Claim 22**, in addition to the elements stated above regarding claim 13, Monterio further discloses:

wherein the sources include one or more synthesizers that generate the one or more streams of audio wave data (i.e. the incoming signal is processed by a decoder; col. 4 lines 25 – 28. It is inherent that if a decoding takes place that a coding (*synthesizing*) must have taken place previously).

Regarding **Claim 24**, in addition to the elements stated above regarding claim 13, Monterio further discloses:

wherein the sources include a plurality of synthesizers that generate the one or more streams of audio wave data (i.e. the incoming signal, received via satellite, cable, hard disk or broadcast feed; Fig. 1; is processed by a decoder; col. 4 lines 25 – 28. It is inherent that if a decoding takes place that a coding (*synthesizing*) must have taken place previously).

Regarding **Claim 25**, Monterio discloses:

An audio generation system (abstract), comprising:

a synthesizer that generates multiple streams of audio wave data (i.e. the primary servers compress (*synthesize*) the audio data; col. 5 lines 10 – 15, and then pass the streams to the media servers which then pass the multiple streams to the users; Fig. 1)

a plurality of audio wave data consumers that receive the multiple streams of audio wave data (i.e. audio information is delivered in real time to any number of widely distributed users; col. 2 lines 10 – 15);

a software component that dynamically generates a plurality of logical buses in response to a need associated with receiving the multiple streams of audio wave data (i.e. A user chooses to tune in or tune out of a particular channel; col. 2 lines 20 – 22; the media servers start and stop streams of information to those users col. 3 lines 29 - 33; the assignment of users to media servers is done using control transactions among the user; col. 6 lines 20 – 25; and the control architecture handles the starting and stopping of audio streams; col. 8 lines 32 - 36. In other words, the control architecture (through software objects) dynamically generates and releases connections (*logical buses*) in response to a user tuning in or out),

an individual logical bus configured to correspond to an audio wave data consumer (i.e. the media servers are connected to the users to send information over an individual logical bus; Fig. 1),

receive one or more streams of audio wave data, and route the one or more streams of audio wave data to the audio wave data consumer (i.e. the control servers are responsible for keeping track of which users are listening to which channels and for directing the media servers to start and stop streams of information to those users; col. 3 lines 29 – 34); and

wherein the synthesizer is configured to route at least one of the streams of audio wave data to different ones of the logical buses (i.e. the control servers are responsible for keeping track of which users are listening to which channels and for directing the media servers to start and stop streams of information to those users; col. 3 lines 29 – 34).

Regarding **Claim 27**, in addition to the elements stated above regarding claim 25, Monterio further discloses:

wherein the synthesizer has a channel that generates a stream of audio wave data and that is configurable to route the stream of audio wave data to the individual logical bus (i.e. the primary servers transmit audio data to the media servers; Fig. 1),

and is further configured to dynamically release at least one of the logical buses when no longer needed (the control architecture handles the starting and stopping of audio streams; col. 8 lines 32 – 36).

Regarding **Claim 28**, in addition to the elements stated above regarding claim 25, Monterio further discloses:

wherein the synthesizer has a channel that generates a stream of audio wave data that is configurable to route the stream of audio wave data to a plurality of the logical buses, and wherein the logical buses receive the stream of audio wave data and route the stream of audio wave data to a plurality of corresponding audio wave data consumers (i.e. A user chooses to tune in or tune out of a particular channel; col. 2 lines 20 – 22; the media servers start and stop streams of information to those users col. 3 lines 29 - 33; the assignment of users to media servers is done using control transactions among the user; col. 6 lines 20 – 25; and the control architecture handles the starting and stopping of audio streams; col. 8 lines 32 - 36. In other words, the control architecture (through software objects) dynamically generates and releases connections (*logical buses*) in response to a user tuning in or out).

Regarding **Claim 29**, in addition to the elements stated above regarding claim 25, Monterio further discloses:

wherein the synthesizer has a plurality of channels that each generate a stream of audio wave data and that are configurable to route at least one of the streams of audio wave data to a plurality of the logical buses, and wherein the logical buses receive the streams of audio wave data and route the streams of audio wave data to a plurality of corresponding audio wave data consumers (i.e. A user chooses to tune in or tune out of a particular channel; col. 2 lines 20 – 22; the media servers start and stop streams of information to those users col. 3 lines 29 - 33; the assignment of users to media servers is done using control transactions among the user; col. 6 lines 20 – 25;

and the control architecture handles the starting and stopping of audio streams; col. 8 lines 32 - 36. In other words, the control architecture (through software objects) dynamically generates and releases connections (*logical buses*) in response to a user tuning in or out).

Regarding **Claim 30**, in addition to the elements stated above regarding claim 25, Monterio further discloses:

wherein the synthesizer generates a stream of audio wave data in response to a synthesizer instruction (i.e. the control architecture handles the starting and stopping of audio streams; col. 8 lines 30 – 35; and the user chooses to tune in or out; col. 2 lines 20 – 22; the synthesizer instruction being the request from the user).

Regarding **Claim 32**, in addition to the elements stated above regarding claim 25, Monterio further discloses:

a second synthesizer to generate additional streams of audio wave data, and wherein the individual logical bus is configured to receive one or more of the additional streams of audio wave data and route the additional streams of audio wave data to the audio wave data consumer (i.e. a second primary server is disclosed in Fig. 1).

Regarding **Claim 33**, in addition to the elements stated above regarding claim 25, Monterio further discloses:

a second synthesizer to generate additional streams of audio wave data and wherein a second logical bus is configured to correspond to the audio wave data consumer, receive one or more of the additional streams of audio wave data, and route the additional streams of audio wave data to the audio wave data consumer (i.e. a second primary server is disclosed in Fig. 1).

Regarding **Claim 36**, Monterio discloses:

a plurality of logical bus objects configured to receive audio wave data wherein each logical bus object corresponds to an audio wave data consumer, wherein each logical bus object is dynamically generated in response to a need associated with receiving the audio wave data, and wherein at least one of the logical bus objects can be dynamically released when no longer needed to route a stream of audio wave data (i.e. A user chooses to tune in or tune out of a particular channel; col. 2 lines 20 – 22; the media servers start and stop streams of information to those users col. 3 lines 29 - 33; the assignment of users to media servers is done using control transactions among the user; col. 6 lines 20 – 25; and the control architecture handles the starting and stopping of audio streams; col. 8 lines 32 - 36. In other words, the control architecture (through software objects) dynamically generates and releases connections (*logical buses*) in response to a user tuning in or out);

a data structure that correlates each logical bus object according to a function of an audio wave data consumer that corresponds to a logical bus object (i.e. Fig 3. shows a multicast distribution structure and Fig. 4 shows a unicast distribution structure;

furthermore, if the Media servers is directly connected to the same physical network as the user, multicast can be used to transmit the packet stream to all of the users; col. 6 lines 6 – 8; and in the case that a media server is serving a user who is not on the same physical network, a unicast transmission is used; col. 6 lines 17 – 19).; and

wherein one or more streams of audio wave data are assigned to a logical bus object based on the function of an audio wave data consumer that corresponds to the logical bus object (i.e. A user chooses to tune in or tune out of a particular channel; col. 2 lines 20 – 22; the media servers start and stop streams of information to those users col. 3 lines 29 – 33).

Regarding **Claim 37**, in addition to the elements stated above regarding claim 36, Monterio further discloses:

wherein a logical bus object receives one or more of the assigned audio wave data streams and routes the audio wave data streams to the corresponding audio wave data consumer (i.e. the control servers are responsible for keeping track of which users are listening to which channels and for directing the media servers to start and stop streams of information to those users; col. 3 lines 29 – 34).

Regarding **Claim 38**, in addition to the elements stated above regarding claim 36, Monterio further discloses:

a synthesizer that generates a plurality of streams of audio wave data wherein at least one of the streams of audio wave data is provided to different respective logical

buses (i.e. the incoming signal, received via satellite, cable, hard disk or broadcast feed; Fig. 1; is processed by a decoder; col. 4 lines 25 – 28. It is inherent that if a decoding takes place that a coding (*synthesizing*) must have taken place previously; and A user chooses to tune in or tune out of a particular channel; col. 2 lines 20 – 22; the media servers start and stop streams of information to those users col. 3 lines 29 – 33).

Regarding **Claim 40**, in addition to the elements stated above regarding claim 25, Monterio further discloses:

an audio wave data generation object configured to receive audio content and an instruction to generate the one or more streams of audio wave data (i.e. A user chooses to tune in or tune out of a particular channel; col. 2 lines 20 – 22; the media servers start and stop streams of information to those users col. 3 lines 29 – 33).

Regarding **Claim 44**, Monterio discloses:

A data structure for an audio processing system (Fig. 1), comprising:

a bus identifier parameter to uniquely identify a logical bus that corresponds to an audio wave data consumer (i.e. the channel activation object includes a host object identifying the host carrying the channel; table 1);

a function identifier parameter to identify an effects-processing function of the audio wave data consumer (i.e. the channel activation object includes a compression type so the user's system knows what type of compression to use; Table 1);

a programming reference to identify the audio wave data consumer (i.e. the login information object; Table 1); and

wherein at least one stream of audio wave data is routed to a plurality of different logical buses (i.e. the steam is routed to multiple users; Fig. 1),

with the bus identifier parameter being defined according to the function identifier parameter of the corresponding audio wave data consumer (i.e. the host object and compression type are sent together, the compression type depending upon the host from which the stream is received; Table 1).

Regarding **Claim 45**, Monterio further discloses:

providing an audio wave data generation component configured to receive audio content and an instruction to generate one or more streams of audio wave data (i.e. the primary servers receive the audio streams and pass them through the media servers to the user depending on the request; Fig. 1)

providing an audio wave data consumer component configured to receive the one or more streams of audio wave data (i.e. a user receives streams of audio; Fig. 1)

dynamically generating at least one logical bus component in response to a need associated with receiving the streams of audio wave data, the logical buses configured to route the one or more streams of audio wave data to the audio wave data consumer component; and dynamically releasing at least one of the logical bus when no longer needed to route a stream of audio wave data (i.e. A user chooses to tune in or tune out of a particular channel; col. 2 lines 20 – 22; the media servers start and stop streams of

information to those users col. 3 lines 29 - 33; the assignment of users to media servers is done using control transactions among the user; col. 6 lines 20 – 25; and the control architecture handles the starting and stopping of audio streams; col. 8 lines 32 - 36. In other words, the control architecture (through software objects) dynamically generates and releases connections (*logical buses*) in response to a user tuning in or out).

Regarding **Claim 46**, in addition to the elements stated above regarding claim 45, Monterio further discloses:

wherein the audio wave data generation component is a synthesizer (i.e. the primary servers compress (*synthesize*) the audio data; col. 5 lines 10 – 15, and then pass the streams to the media servers which then pass the multiple streams to the users; Fig. 1).

Regarding **Claim 52**, in addition to the elements stated above regarding claim 1, Monterio further discloses:

creating a data structure and designating which of the logical buses correspond to an audio wave data consumer (i.e. Fig 3. shows a multicast distribution structure and Fig. 4 shows a unicast distribution structure; furthermore, if the Media servers is directly connected to the same physical network as the user, multicast can be used to transmit the packet stream to all of the users; col. 6 lines 6 – 8; and in the case that a media server is serving a user who is not on the same physical network, a unicast transmission is used; col. 6 lines 17 – 19).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 6, 17, 19, 31, 39 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Monterio (U.S. Patent 5,778,187).

Regarding **Claims 6, 17 and 47**, in addition to the elements stated above regarding claims 1 and 13, Monterio fails to disclose the limitations set forth in claims 6 and 17.

However, examiner takes Official notice that it is notoriously well known in the art to buffer content in a real time delivery situation before play back. This would read upon the limitation of wherein the audio wave data consumer is a data buffer that performs an action of buffering audio wave data prior to outputting the audio wave data.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Monterio's device to buffer the content before playback. One would have been motivated to do so in order to prevent unnecessary skips or pauses in playback during a poor transmission.

Regarding **Claim 19**, in addition to the elements stated above regarding claim 13, Monterio fails to disclose the limitations set forth in claim 19.

However, examiner takes Official notice that it is notoriously well known in the art to buffer content in a real time delivery situation before play back. This would read upon the limitation of wherein the audio wave data consumer is a data buffer that buffers one or more of the streams of audio wave data.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Monterio's device to buffer the content before playback. One would have been motivated to do so in order to prevent unnecessary skips or pauses in playback during a poor transmission.

Further, Monterio discloses the user device decompresses the audio data ; col. 5 lines 5 – 17. Performing this operation after the buffering would read upon the limitation of effects-processes the buffered audio wave data.

Regarding **Claims 31 and 39**, in addition to the elements stated above regarding claim 25, Monterio fails to disclose the limitations of claim 25.

However, Examiner takes Official Notice that MIDI audio format is notoriously well known in the art. The system disclosed by Monterio discloses generating streams of audio in response to instructions, as shown in claim 30. It would be obvious to use a MIDI format as the format for the audio streams in Monterio. Further, since the user can request the audio stream this would read upon the limitation of wherein the synthesizer generates a stream of audio wave data in response to a MIDI instruction.

It would have been obvious to one of ordinary skill in the art at the time of the invention to encode the audio data as disclosed by Monterio in a MIDI format. One would have been motivated to do so to reduce the amount of information needed to transmit the audio to the user, thereby reducing transmission times.

Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Monterio (U.S. Patent 5,778,187) in view of Crosby (U.S. Patent 6,628,928).

Regarding **Claim 23**, in addition to the elements stated above regarding claim 13, Monterio further discloses:

wherein the sources include a plurality of synthesizers that generate the one or more streams of audio wave data (i.e. the incoming signal, received via satellite, cable, hard disk or broadcast feed; Fig. 1; is processed by a decoder; col. 4 lines 25 – 28. It is inherent that if a decoding takes place that a coding (*synthesizing*) must have taken place previously).

Monterio does not explicitly disclose wherein at least one of the synthesizers generates a plurality of outputs or and wherein respective ones of the outputs are provided to different respective logical buses.

Crosby discloses typically a satellite broadcaster will transmit multiple radio channels using a single carrier frequency with digital information encoded therein identifying the digital channels. Applying this teaching to the satellite feed taught by Monterio would create a satellite feed with multiple channel outputs and would read

upon the limitation of wherein at least one of the synthesizers generates a plurality of outputs.

Furthermore, the combination would teach:

and wherein respective ones of the outputs are provided to different respective logical buses (i.e. A user chooses to tune in or tune out of a particular channel; col. 2 lines 20 – 22 in Monterio).

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply Crosby's teachings of multiple channel satellite radio to the Satellite feed disclosed by Monterio. One would have been motivated to do so to transmit more channels over a given frequency more efficiently thereby allowing many more channels to be available to a user.

Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Monterio (U.S. Patent 5,778,187) in view of Barton (U.S. Patent 6,233,389).

Regarding **Claim 26**, in addition to the elements stated above regarding claim 25, Monterio fails to disclose the limitations set forth in claim 26.

Barton discloses allowing a user to store a program while a user is viewing another. Applying this teaching to the Monterio reference would allow a user to receive two broadcasts simultaneously thereby creating two connections. This would read upon the limitation of wherein a second logical bus is configured to correspond to the audio wave data consumer, receive one or more additional streams of audio wave data, and

route the one or more additional streams of audio wave data to the audio wave data consumer.

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of receiving two programs and storing one as taught by Barton to the user playback system taught by Monterio. One would have been motivated to do so in order to prevent missing programs that were broadcast simultaneously.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Marks (U.S. Patent application publication 2001/0053944).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew C. Flanders whose telephone number is (571) 272-7516. The examiner can normally be reached on M-F 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on (571) 272-7848. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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